CHAPTER 3

FORESTWIDE STANDARDS AND GUIDELINES

This chapter describes forestwide standards and guidelines. Additional standards and guidelines for each management area are described in Chapter 4, "Management Area Goals, Desired Future Conditions, Standards, and Guidelines." Standards and guidelines provide management direction for making decisions that help achieve the national forests' desired future conditions (DFCs), goals, and objectives.

Standards are requirements that limit resource management practices and uses for environmental protection, for public safety, or to address an issue. Standards are measurable and capable of being monitored.

Guidelines promote the achievement of goals and objectives in a manner that permits operational flexibility to respond to variations over time, such as changing site conditions or changing management circumstances.

Standards and guidelines are listed by resource program areas and begin with a description of the resource area for which the standards and guidelines apply.

Access

Forest access policy relates to allowable travel by pedestrians, horses, and motorized and nonmotorized vehicles. The Forest Supervisor has authority to close *roads* and *areas* for safety and resource protection. Also, areas may be closed to some types of access to achieve a desired future condition. For example, congressionally designated wilderness areas are restricted to horse, canoe, wheelchair (including motorized, if required for everyday mobility), and foot travel, unless otherwise stated in the act that established the wilderness. In addition, some trails are restricted to certain types of travel to provide a desired recreation experience.

Definitions

Forest development road. A forest road under the jurisdiction of the Forest Service. Forest development roads are assigned a number and inventoried by traffic service levels A through D. Not all forest development roads are marked on the ground.

Marked, numbered road. A forest development road that is marked on the ground.

Designated trail. A designated trail is `a trail wholly or partly within or adjacent to and serving a part of the National Forest System and which has been included in the Forest Development Trail System Plan," CFR 261.2. Designated trails are inventoried by type of user permitted and degree of maintenance. They are maintained on the trail system inventory data base. All designated trails are identified on the ground.

Motorized vehicle. Automobiles, trucks, motorcycles, all-terrain vehicles, off-highway vehicles, or any vehicles propelled by a motor, excluding motorized wheelchairs.

Unmarked travelway. A travelway that looks like a road or trail but is not on the road or trail system and is not considered a numbered road or designated trail (this includes firelines).

Cross-country travel. Cross-country travel is land travel through the forest that does not occur on an open, numbered road, a designated trail, or an unmarked travelway.

Street-legal. A vehicle that meets all the legal requirements to travel on a public road.

Access Standards

Upon Forest Plan approval, the following cross-country travel standard will be immediately in effect forestwide. Exceptions are allowed for administrative use and activities conducted under contract or permit and areas under Forest Supervisor's closure.

AC-1—

Users	Cross-country travel permitted?
People on foot	Yes
People on horseback	Yes
People on motorized vehicles	No
People on bicycles	No

The following standard, which apply to motorized vehicles and bicycles, will go into effect 2 years after Forest Plan approval. This delayed implementation period will allow time for a system of trails and marked, numbered roads to be designated in restricted areas. This process will incorporate existing travelways as much as possible and include public participation and collaboration with local user groups.

AC-2—There are three categories of areas where bicycle and motorized vehicle use varies. These areas are shown on the Access Maps in Appendix A.

- 1. Areas where motorized vehicles and bicycles are prohibited.
- 2. Areas where motorized vehicles and bicycles are restricted to open, marked, numbered roads and designated trails specified for their use.
- 3. Areas where motorized vehicles and bicycles are permitted to travel on open, marked numbered roads, designated trail specified for their use, and unmarked travelways.

Fire

Fire management is divided into two major program areas: prescribed fire and wildland fire. These program areas have different purposes with different standards and guidelines.

Prescribed Fire

The Forest Service conducts controlled or prescribed fires in the understory vegetation. These reduce hazardous fuel levels, improve wildlife habitats, maintain ecological processes, and create sites for the establishment of tree seedlings. Each prescribed fire is conducted in accordance with a written fire plan, as directed by FSM 5140, *Prescribed Fire*.

In 1994, the Regional Forester approved the use of wildland fire as a management tool to maintain ecological processes in wilderness and wilderness study areas on the national forests in Florida. Eleven requirements for wildland fire are listed in FSM 5142.2, *Wildland Fire*. In 1995, the Regional Forester approved the use of management-ignited prescribed fire in these areas when lightning-ignited fire does not occur with the frequency or intensity needed to maintain fire-dependent ecosystems.

- **FI-1**—Develop a prescribed fire plan and risk assessment for prescribed fire. This includes any fire in a wilderness area that has been declared a wildland fire. Conduct and document a post-burn assessment on at least 25 percent of the completed prescribed fires.
- **FI-2**—Obtain a burning authorization number from the State Division of Forestry and record it on the prescribed fire plan.
- **FI-3**—A prescribed fire that exceeds, or is anticipated to exceed, one or more prescription parameter or line-holding capability and cannot be returned to prescription with project funds is a wildfire. Once an escaped prescribed fire has been declared a wildfire, it cannot be redesignated a prescribed fire.
- **FI-4**—Display smoke warning signs on paved roads adjacent to prescribed fire projects. Delineate in the fire plan the response in the event that a prescribed fire project threatens to cause a traffic hazard.
- **FI-5**—Protect active red-cockaded woodpecker (RCW) cavity trees during prescribed burning. This may include cutting, raking, wetting, and/or back burning fuels adjacent to active cavity trees. Do not construct plowlines within RCW clusters, unless they are needed to protect active RCW cavity trees from damage or to protect life or private property.
- **FI-6**—It is permissible to burn the same acreage in 2 sequential years and to apply only growing-season burns to the same acreage for 3 or more sequential burning cycles.
- **FI-7**—Minimize the use of plowed firelines for prescribed burns. Favor the use of alternatives such as disked firelines, foam, water, existing roads, or natural barriers.

- **FI-8**—Rehabilitate new plowed firelines used for prescribed fire, unless rehabilitation will cause unacceptable damage. Wherever possible, use disked lines where permanent lines are needed.
- **FI-9**—Do not prescribe burn heritage sites that contain surface artifacts, features, structures, or cultural remnants that could be damaged. (**Note:** Consult with district archeologist to assess risk of damage.)
- **FI-10**—If plowed firelines are needed near designated trails, minimize visual impact and damage to the trail. Avoid plowing firelines parallel to a trail. If a plowed fireline must run parallel to a trail, keep it 100 feet away, if possible. When a plowed fireline crosses a trail, cross at right angles. Minimize heavy equipment damage to trails and restore trails to original condition afterward.
- **FI-11**—Include provisions in prescribed burning plans that assure sensitivity to scenic resources within the view of level 1 travelways and entrance roads for level 3 or above recreation areas.

Wildland Fire

The Forest Service responds to every wildland fire on national forests with an appropriate suppression response. This response could range from monitoring a nonthreatening fire to a full-scale attack of a fire that threatens life, property, and resources. In addition, naturally-occurring fires within wilderness and wilderness study areas may be managed for resource benefit, as described in the *Federal Wildland Fire Policy and Program Review* (U.S. Department of Agriculture and U.S. Department of Interior, Washington, D.C., December 1995). Wildland fires in all other areas of the national forests may not be managed for resource benefit; however, the full range of other appropriate suppression responses is available. Fire control lines may consist of roads or natural barriers (such as wetlands), foam or water lines, or disked or plowed firelines. The Forest Service tries to minimize the use of plowed firelines. The incident commander has full authority to select the appropriate suppression response based on line officer delegation, values at risk, predicted weather, burning conditions, forces available, resource damage potential, and total forestwide wildland fire situation.

- **FI-12**—Evaluate all naturally-occurring wildland fires within wilderness for appropriate response. If the line officer decides to managed the fire for resource benefit, a wildland fire situation analysis must be prepared along with prescription parameters.
- **FI-13**—Rehabilitate all new plowed firelines used for wildfire suppression, unless the rehabilitation will cause unacceptable damage. This includes existing firelines that become redisturbed.
- **FI-14**—Do not place a ground-disturbing fireline within boundaries of a heritage site, unless the fireline directly benefits the heritage resource or protects life or property.

Heritage Resources

Sites of archeological, historical, and cultural significance can be found on the national forests. These include remains of Native American villages, historical home sites, grave sites, and sites where culturally important events occurred. Many sites are known, but others have yet to be discovered. The Forest Service seeks to protect sites that are important to our heritage. Under Federal law direction, *National Forests in Florida* works with the Florida State Historic Preservation Office (SHPO), with whom it has a Memorandum of Understanding, to make sure that no sites are damaged. For a known site, protection might include avoiding any activity that could affect it and keeping information about it confidential to prevent looting. For undiscovered sites, protection includes estimating the likelihood that a site may occur in a given area and then reviewing every activity, whether it be a Forest Service or a public activity, for its possible effect on a site. To protect undiscovered sites from looting, for example, use of metal detectors is restricted. *National Forests in Florida* also promotes research and teaching the public about heritage resources.

- **HE-1**—If cultural resources are encountered, regardless of whether the area has been previously disturbed, halt activities and notify Heritage Program personnel.
- **HE-2**—Require Archeological Resources Protection Act (ARPA) permits for all archeological research that is not performed under the personal supervision of Forest Service Heritage Program personnel. When a qualified professional obtains an ARPA permit, that person may be allowed to study heritage resource sites. Archeological surveys performed under contract for the Forest Service do not require an ARPA permit.
- **HE-3**—Use interagency agreements or Memoranda of Understanding to:
 - 1. cover archeological surveys of a repetitive nature under one ARPA permit as opposed to individual ARPA permits, and
 - 2. identify ``no impact" activities/projects that do not require archeological survey (e.g., repainting the lines on roads).
- **HE-4**—Disclose the location of sites to Forest Service personnel only if appropriate resource management requires that knowledge. If site information is to be given to a cooperator, stipulate within the agreement with the cooperator how that information will be shared. Keep site locations confidential, except for public education and interpretation. In particular, do not disclose site location unless disclosure is determined to have a ``no effect" or ``no adverse effect" on the site. For more information regarding this determination, *see* FSM 2361.32a, *No Effect*; FSM 2361.32b, *No Adverse Effect*; FSM 2361.32c, *Beneficial Effect*; and FSM 2361.32d, *Adverse Effect*.
- **HE-5**—Do not exhibit or display human remains. Keep confidential any reburial location of human remains. Afford these remains the same protection as human burials in their original location. Protect Native American human remains, graves, and funerary items according to the Native American Graves Protection and Repatriation Act (NAGPRA).

HE-6—Allow on-site interpretive services, subject to advice by forest archeologist, only when adequate protective measures are in place to ensure protection of resources.

HE-7—Prohibit metal detector use, except

- 1. in areas where administrative work—such as law enforcement investigation, permitted research activities, and surveying—is being conducted, and
- 2. in recreation areas that have been cleared specifically for metal detector use. At the entrance to the area, post the information that the recreation area is open to metal detector use.

Site Occurrence Unknown

See the Memorandum of Understanding with SHPO to determine the appropriate level of review for activities in zones of high, medium, and low site probability.

Sites Are Known, Significance Is Unknown

- **HE-8**—Until a site's significance is determined, do not interpret it for the public and do not conduct activities that could disturb it.
- **HE-9**—When ground-disturbing activities are planned within 200 feet outside of site boundaries, clearly mark site boundaries so site can be seen and avoided.

Site Occurrence Known, Site Is Not Significant

- **HE-10**—Use minimal impact methods for ground-disturbing activities as defined in the Memorandum of Understanding.
- **HE-11**—Retain nonsignificant historic structures until they have been documented.

Site Occurrence Known, Site Is Significant

- **HE-12**—Mitigate management activities within site boundaries, as listed in the Memorandum of Understanding.
- **HE-13**—Minimize or avoid management activity impact on the site. For example, chemical site preparation might be used as a silvicultural alternative to mechanical site preparation.
- **HE-14**—If a site will be affected, excavate a representative percentage of that site.
- **HE-15**—For sites containing human remains, follow the guidelines found in Chapter 872, Florida Statute ``Offenses Concerning Dead Bodies and Graves"; Regional Policy Statement ``Treatment of Human Remains"; and Heritage Program Guidelines. For Native American remains, apply NAGPRA protocol procedures.
- **HE-16**—When ground-disturbing activities are planned within 200 feet outside of site boundaries, clearly mark site boundaries so site can be seen and avoided.

HE-17—Implement site protection measures, such as:

- 1. Stabilization
- 2. Erosion control
- 3. Signing
- Road closure
- 5. Vegetative screening
- 6. Closure order for metal detector possession and/or use
- 7. Confidentiality of site location information
- 8. Patrolling sensitive sites on rotating schedules
- 9. Interpreting preservation ethics to the public
- 10. Archeological salvage of data threatened with imminent destruction or loss
- 11. Treating historic structures for insect infestation
- 12. Repairing damage from natural deterioration and vandalism

Infrastructure

The infrastructure of the national forests includes the roads and buildings necessary for appropriate management of the national forests. The design and management of these are regulated by both national standards and Forest Service manuals and handbooks. The primary goal of these regulations is to ensure safety and minimize environmental damage.

Road Management

The location and design of roads on the national forests are guided by FSH 7709.56, *Road Preconstruction Handbook*. This handbook provides direction for producing safe, environmentally appropriate roads. When a project requires road access, the first choice is to provide access along existing roads and travel routes. The maintenance of system roads is guided by FSH 7709.58, *Transportation System Maintenance Handbook*, which describes different levels of maintenance for different levels of forest development roads.

- **IN-1**—Reduce the negative hydrological impact of existing and future roads by placing structures, where necessary, to reestablish or maintain natural water flow.
- **IN-2**—Close and return to resource production all existing roads, whether temporary or system roads, that are not needed for resource activities.
- **IN-3**—Close system roads in the following cases:
 - 1. To reduce unacceptable impacts on proposed, endangered, threatened, or sensitive (PETS) species or their habitats.

- 2. When extreme law enforcement situations exist.
- 3. Temporarily, when safety hazards exist.
- 4. For special research.
- 5. For seasonal closures at specific sites.
- 6. Other management reasons.

Building Management

FSH 7309.11, *Building and Related Facilities Handbook*, guides the maintenance of Forest Service buildings. Newly constructed buildings must meet accessibility and energy conservation requirements. Older buildings can be retrofitted to meet these standards as funds become available.

Insect and Disease Control

The Forest Service recognizes that a healthy ecosystem has periodic outbreaks of insects and diseases. If an outbreak threatens to cause significant losses or adversely affect PETS species, the Forest Service will take measures to reduce the hazard. Standards and guidelines specific to southern pine beetle and insects affecting RCWs are found in Record of Decision, Final Environmental Impact Statement for the Suppression of the Southern Pine Beetle, Southern Region (FEIS SPB R8) and Record of Decision, Final Environmental Impact Statement for the Management of the Red-cockaded Woodpecker and its Habitat on National Forests in the Southern Region.

Lands

The Forest Service buys and occasionally exchanges property, maintains boundaries of the national forests, and considers, and grants, requests for special uses of national forest land. The guidelines for these activities are found in FSM 5400, *Landownership*; FSM 5500, *Landownership Title Management*; and FSM 2700, *Special Uses Management*.

Land Purchase and Exchange

The Forest Service may purchase or exchange land or partial interests. No property leaves a national forest unless its exchange has been approved through a process that includes public notification and input and evaluation of the property's importance.

- **LA-1**—Maintain a landownership adjustment map based on the goals and objectives for a given area.
- **LA-2**—Use the following criteria to guide property acquisitions.
 - 1. Highest priority (not listed in any order of priority):
 - a. Property associated with riparian ecosystems, such as water frontage on lakes and major streams.

- b. Habitat for proposed, endangered, or threatened species.
- c. Property having unique historical or heritage resources, when these resources are threatened or when management may be enhanced by public ownership.
- e. Property valuable for outdoor recreation or needing protection for aesthetic purposes.
- f. Property needed for protection and management of administratively and congressionally designated areas.
- g. Property needed to enhance or promote watershed improvements that affect the management of national forest riparian areas.
- h. Environmentally sensitive property, such as wetlands and old-growth forests.
- i. Buffer property needed for protection of property acquired for specific purposes listed above.
- Large parcels of property that are within or adjacent to existing national forest boundaries and that promote critical ecosystem protection and wildlife habitat linkages.
- k. Property to consolidate national forest ownership and reduce land-use conflicts.
- 1. Property that provides links to other public lands.
- 2. Second priority (not listed in any order of priority):
 - a. Key tracts of an ecosystem that are not urgently needed but will promote more effective management of the ecosystem and will meet specific needs for vegetative management, valuable watershed management, research, public recreation, or other defined management objectives.
 - b. Property needed to protect resource values by eliminating or reducing fire risks, soil erosion, or occupancy trespass cases.
 - c. Property needed to reduce expenses by taking advantage of common efficiencies.
- 3. Third priority: All other property desirable for inclusion in the National Forest System.
- **LA-3**—Allocate new acquisitions to a management area at least annually. Until that is completed, manage the acquisition in a custodial fashion—providing basic public safety, protection, and status quo maintenance of the land, resources, and infrastructure.
- **LA-4**—Consider first for exchange those national forest lands or partial interests with the following characteristics:

- 1. Property inside or adjacent to communities or intensively developed private land and chiefly valuable for purposes other than national forests.
- 2. Property or interests that best serve a public need in State, county, city, or other Federal agency ownership.
- 3. Property under special-use authorizations and occupied by substantial structural improvements.
- 4. Property having boundaries, or portions of boundaries, with configurations that make management inefficient—such as projecting necks or long, narrow strips of land or land discontinuous from the main body of the national forest.
- **LA-5**—Acquire or exchange access with other agencies, states, counties, and private interests as necessary to ensure management objectives are met.
- **LA-6**—Do not exchange national forest lands that have significant heritage sites or threatened or endangered species until they have been mitigated.

Land Boundary Maintenance

In Florida, the national forests have more than 1,200 miles of boundary lines. The Forest Service seeks to maintain national forest boundary lines so that resurvey is not needed. Established lines should be re-marked every 7 years. The Forest Service also works to resolve questions of boundary location. When boundary lines change as a result of acquisitions, exchanges, claims, and Small Tract Act cases, the Forest Service must ensure new boundaries are marked.

Easements, Grants for Roads and Trails

The Forest Service considers applications for road easements for access to private property. Easements are granted only if no other reasonable access is possible. Occasionally, the Forest Service seeks easements from other landowners when there is a demonstrated need for the access and the road or trail cannot be accommodated on national forest land.

LA-7—When feasible, issue a single easement to a collective group that could share the travelway rather than issue individual easements.

Special Uses

Members of the public approach the Forest Service with a diverse array of ideas about how to use national forest lands. The Forest Service must always weigh whether the proposed use is compatible with the values that make the national forests irreplaceable forests—including plants, animals, beauty, clean air and water, recreation opportunities, and forest products. Applicants for special-use permits should note that the permitting process may be time-consuming, may require multistep National Forest Management Act analysis and National Environmental Policy Act (NEPA) documentation, and ultimately may not be approved.

- **LA-8**—Evaluate special-use applications to see if they are in the public interest. At a minimum, these proposals should:
 - 1. be consistent with Forest Plan management area objectives, standards, and desired future conditions,
 - 2. be consistent with other applicable Federal, State, and local statutes and regulations, and
 - 3. not be undertaken on national forest land if they can be reasonably accommodated on private land.
- **LA-9**—Designate existing transportation and utility routes, and rights-of-way capable of accommodating these facilities as right-of-way corridors. Subsequent right-of-way grants will, to the extent practicable, be confined to designated corridors. Transportation and utility route proposals for crossing national forest land will be evaluated initially on a National Forest System policy basis. Purpose, need, surrounding issues, Forest Plan desired future conditions, public values for national forests, and alternative locations off national forests will be reviewed in detail.
- **LA-10**—For resource collection, follow direction in FSM 2719, *Uses For Which Special-Use Authorizations Are Not Required*, and FSM 1563, *Tribal Governments*. Native Americans may be given free-use permission to collect resources from national forests for traditional and ceremonial use. Some restrictions may apply on collections from some areas and of some species.

Recreation Residences

A generation ago *National Forests in Florida* participated in a national program intended to increase recreational use of national forests. This program permitted private individuals to build unobtrusive recreation residences in designated sites on the national forest. Many of these private residences still exist and continue to be regulated by the Forest Service.

- **LA-11**—Do not issue recreation residence permits on lots not already occupied by a recreation residence.
- **LA-12**—If a recreation residence permit is revoked due to noncompliance, do not reissue permit. The lot will no longer be available for recreation residence use.
- **LA-13**—If a recreation residence is destroyed by a catastrophic event and the permittee decides not to rebuild, do not make the lot available for recreation residence use. The permittee has 180 days to decide and 1 year after the decision date to complete the rebuilding.
- **LA-14**—If inspection discovers noncompliance with permit terms and conditions, use the following procedures:
 - 1. Following a determination of noncompliance, give written notice to permittee regarding permit violations.

- 2. Follow the procedures and time frames included in the permit.
- 3. Failure to comply with will result in a request for removal of the improvements, which if not carried out by the permittee will result in a notice of impoundment. Impoundment, search and seizure procedure will be coordinated with a Forest Service Special Agent or Law Enforcement Officer.
- **LA-15**—The desired condition for the "public access strip"—the narrow strip (25′-75′ in width) of national forest land located between the recreation residence lots and adjacent water body (river, pond, lake)—is to allow the vegetating to be in a natural forested condition with no structures or human-introduced features present, with the exception of erosion control or other environmental protection features. This strip is to provide access and enjoyment to the forest user.
- **LA-16**—Current recreation residence permits that allow for existing improvements or vegetative modifications in the public strip will remain in effect. No additional improvements will be allowed in the public strip, by current or future permit holders. Due to their improvements and modifications in the adjacent public strip, these lots are considered `waterfront." The land in the public strip is available for general public use, but the improvements (docks, tables, etc.) are for the exclusive use of the permit holder as they are the responsible party for the condition of the improvements.
- **LA-17**—Current recreation residence permits that do not contain improvements or vegetative modifications in the public strip will remain in effect. Other permit holders who have a presence in the strip may choose to remove the improvements and allow the vegetation improvements and allow the vegetation to recover. No further improvements or modifications will be allowed. Due to the absence of improvements and the natural character of the public strip, the adjacent recreation residence lot is considered nonwaterfront.
- **LA-18**—The Forest Service may permit new structures in the public strip for erosion control or other environmental protection.

Law Enforcement

Unfortunately, national forests occasionally are sites of illegal activities—such as dumping, timber theft, damage to resources, arson, possession of illegal drugs, and violations of laws regulating recreation and wildlife use. To deal with this, the Forest Service has a law enforcement program, guidance for which is found in FSM 5300, *Law Enforcement*. The goal of the program is to prevent criminal violations, protect all people on the national forest as well as both public and private property, and inform all national forest users of applicable laws and regulations. Forest Service law enforcement officers and special agents receive extensive training and are charged to take aggressive action to discover and investigate all violations and take appropriate civil or criminal action. The Forest Service also participates in cooperative law enforcement agreements with State and local authorities to enforce State and local laws on national forests.

Minerals

Mineral and energy resources within national forests may be available for exploration and mining. Regulations governing any specific activity depend on who owns the mineral rights (in Florida, mineral rights are privately owned on about 5 percent of the national forests), whether the land involved is public domain or acquired land (parts of the Ocala and Osceola NFs are public domain land, the rest is acquired land), and what kind of mineral or energy resource is involved. FSM 2800, *Minerals and Geology*, acts as the guidebook. The Forest Service regulates the extraction of common mineral materials such as sand and clay through the special-use permitting process. However, both the Forest Service and Bureau of Land Management (BLM) are involved in other mineral or energy resource (e.g., oil, gas, gold, or titanium) leasing. Management of BLM administered minerals in the State of Florida is guided by the *Florida Resource Management Plan and Record of Decision*, USDI BLM, Jackson District, Eastern States, 1995.

A permit is required to prospect on national forest lands. Permit applications will be evaluated for their consistency with the management area objectives and with Federal, State, and local statutes and regulations. A prospecting permit does not automatically give the successful prospector the right to mine the minerals found.

Leasable Minerals

Gas and oil resources require two decisions prior to BLM offering them for competitive bid. The first decision is whether gas and oil are available or unavailable for lease consideration. This is referred to as the ``availability decision." A second decision is whether to lease specific (specified) lands. This is referred to as the ``leasing decision." Due to the low probability of mineral potential and the lack of leasing interest for these minerals, the availability and leasing decisions will not be made in this Forest Plan. If at a later date, there are expressions of interest in leasing specified lands, further environmental analysis will be conducted.

Existing wilderness areas and wilderness study areas are legislatively withdrawn from mineral entry (common minerals) and leasing (oil, gas, gold, or titanium). The Osceola NF is closed to entry for the purpose of phosphate removal. Upon review, these withdrawals are deemed appropriate and no further action is required. Recommended additions to the wilderness system or National Wild and Scenic Rivers System will be guided by the appropriate legislation.

MI-1—Wherever possible, discourage surface disturbance in bottomlands, wet prairies, savannahs, swamps/bays, sensitive landscapes, and occupied habitat of proposed, endangered, threatened, or sensitive species.

MI-2—To maintain visual quality, do not allow mineral development facilities, except common variety minerals, within 1,000 feet of:

- 1. any traffic service level A or B road,
- 2. a level 3 or higher trail near a recreation area,
- 3. a level 3 or higher recreation area, or
- 4. the Florida National Scenic Trail.

- MI-3—Do not allow a borrow pit to be constructed in a special management zone (new term for streamside management zone) or within ½ mile of a homesite.
- **MI-4**—To maintain visual quality, require a minimum distance of 300 feet between a new borrow pit and a level A or B road, a designated trail, or an entrance road to a recreation area, unless it can be screened from view.
- MI-5—When there is no expectation that a borrow pit will be used again, reclaim to state and county specifications, restore it to a safe condition and revegetate it, or develop it into a pond if desirable.

Range

The Forest Service allows grazing in designated areas of national forests. Permits for grazing are based on a bidding process, with fair market value the minimum acceptable bid. Forest Service direction for range management is found in FSM 2200, *Range Management*, and FSM 2209, *Range Management Handbooks*. Cattle grazing is allowed only in MA 7.2 (*see* Chapter 4, `Management Area Goals, Desired Future Conditions, Standards, and Guidelines").

RA-1—If range allotments remain vacant for 5 consecutive years, the allotment will be closed.

Recreation

Trails

In the national forests, recreational travel is a popular activity, whether it be on foot, on horseback, on a bicycle, on a motorcycle, on a four-wheeled vehicle, or in a boat. Much of this activity occurs on the numbered road system and on the network of unmarked travelways. In addition to these multipurpose routes, the Forest Service develops and maintains designated trails, as guided by FSH 2309.18, *Trails Management Handbook*, *Trails South R8 Handbook*, and *Florida National Scenic Trail Comprehensive Plan*.

- **RE-1**—Avoid locating segments of designated trails on open Forest Service development roads, except to provide for user safety, to avoid sensitive resources, or to make necessary trail connections.
- **RE-2**—To maintain the visual quality of a designated trail, do not locate new roads, temporary roads, or skid trails on a nonmotorized trail tread. Where this conflict arises, relocate either the road, skid trail, or trail. New roads, temporary roads, and skid trails may cross a trail at right angles.
- **RE-3**—To maintain visual quality, discourage camping within 200 feet of a trail, unless it is in a designated camping area.
- **RE-4**—Design new trails to avoid gopher tortoise burrows. In general, keep the trail at least 50 feet away from the burrow entrance. If a gopher tortoise makes a new burrow within 50 feet of an existing trail, it is not necessary to adjust the trail.

RE-5—On the national forests, maintain the hiking-only designation of the Florida National Scenic Trail.

Recreation Facilities

A variety of recreation facilities is provided on the national forests—including picnic areas, fishing piers, swimming areas, boat access sites, and rifle ranges. Management of these areas is directed by FSM 2330, *Development Sites in Public Sector*. These areas may be open year-round or seasonally, and some facilities have user fees.

RE-6—Within the area of concentrated use in level 3 or above recreation areas and facilities, generally use mechanical methods for vegetation management.

Camping Areas

The Forest Service provides designated camping areas at various levels of development, from very primitive to highly developed. The desired amenities by level are:

Level 1 - fire pit.

Level 2 - fire pit or ring; minor trailhead; signs; vault, pit, or portable toilet; water pump; and wooden picnic table.

Level 3 - bulletin boards; charcoal grill; flush toilet, sink, and shower; garbage can; lantern post; leveled tent pad; major or minor trailhead; play area; pavilion; sanitary station; surface parking spur; tilt-back fire ring; water hydrant; and wooden picnic table.

Level 4 - bulletin boards; charcoal grill; drinking fountain; electrical hookup; flush toilet, sink, and shower with hot water; garbage can; interpretive displays; lantern post; major or minor trailhead; paved parking spur; pavilion; play area; recycling bin; safety lighting; sanitary station; surfaced tent pad; tilt-back fire ring; waste sump; water hydrant; and wooden picnic table.

Level 5 - bulletin boards; charcoal grill; concrete/wood or synthetic material picnic table; drinking fountain; electrical hookup; flush toilet with changing area, sink, and shower with hot water; garbage can; interpretive displays/kiosks; lantern post; major trailhead; paved parking spur; paved tent pad; pavilion; play area with concrete/metal/plastic play forms; recycling bin; safety lighting; sanitary station; tilt-back fire ring; waste sump; and water hydrant.

During the general gun hunting season, primitive or tent campers are required to use designated camping areas. Outside that season, primitive or tent campers may set up their campsites in most places on the national forests. To develop and maintain camping areas, the Forest Service follows guidance found in FSM 2330.0, *Publicly Managed Recreation Opportunities*, Exhibit 01; and FSM 2334.03, *Campgrounds and Picnic Grounds*. User fees are common at the more developed camping areas.

Interpretive Facilities

The Interpretive Services program teaches forest visitors about the rich natural and heritage resources found on national forests, as well as how the Forest Service manages the land. This information is often developed in cooperation with other land management agencies or interpretive associations. The goal is to provide information in a timely, accurate, and appealing way.

Scenic Resources

Scenic management standards designed to dovetail with ecosystem protection and recovery activities will be applied to management activities to ensure that the scenic quality of the forest will be maintained. In many instances, management activities designed for sustaining and enhancing forest ecosystems will adequately address scenery management requirements. The process for evaluating the scenic resource and determining standards for managing the scenic quality of the forest is guided by Agriculture Handbook Number 462, *National Forest Landscape Management*, Volume 2.

Several standards presented in the other resource sections of these forestwide standards are designed to provide direction for scenery management. They provide mitigation measures for other resource activities taking place within, and affecting the landscapes of, sensitive viewing locations and travel corridors (roads, trails, and rivers) in the forests. These areas were previously mapped and analyzed for the Visual Resource Management System and remain substantially valid until the revision of the Visual Resource/Scenery Management System is complete.

The general principal for scenery management applied to sensitive viewing areas and travel corridors is that human activities should be in keeping with the scale and patterns of the landscape being viewed (characteristic landscape).

Scenic Byway

National Forests in Florida is proud to have a National Scenic Byway—Apalachee Savannahs Scenic Byway on the Apalachicola NF. As well as being scenic, the byway is home to several rare species and unique ecological communities. The Forest Service and the University of Florida's Department of Landscape Architecture formed a partnership to develop a plan for the byway. This resulted in a series of four documents that blend the disciplines of landscape ecology and environmental psychology. The documents provide guidelines for the management of the byway's scenic, recreation, and interpretive values. The Management Guide: Apalachee Savannahs Scenic Byway, along with its sister documents, will be used to help guide in the management of this specially designated travel corridor.

Vegetation

When *National Forests in Florida* was established earlier in the twentieth century, the main task at hand was reforestation. Today's forests speak proudly of that accomplished task. These forests reached early maturity a few decades later, and society's emphasis was on the commercial use of national forests. Products were harvested, including timber

and lightered stumps used by the distillates industry. Tree species composition has changed on some parts of the forests, because of the past practice of harvesting longleaf pine and replanting slash pine. Wildfires also were aggressively suppressed. We now understand that fires are naturally frequent in this part of the world and many forest species need them. Lack of fire has allowed some species to encroach on others. In coming decades, the Forest Service faces the challenge to thin young stands (to encourage vigorous growth into older ages and help suppressed understory species), restore longleaf pine, and burn frequently with prescribed fire to push back the encroachment that occurred in the absence of fire.

National Forests in Florida follows the guidelines found in the Record of Decision, Final Environmental Impact Statement for Vegetation Management in the Coastal Plain/Piedmont. The standards and guidelines below are consistent with that document and are, in places, more restrictive.

Proposed, Endangered, Threatened, and Sensitive Species

The U.S. Fish and Wildlife Service (USFWS) is responsible for listing proposed, endangered, and threatened species. The Forest Service cooperates with that agency's efforts in conserving these species. The Forest Service conducts activities and programs to assist in the identification and recovery of threatened and endangered plant and animal species. In addition, the Forest Service has identified sensitive species that are showing significant declines in population numbers, density, or habitat capability and manages them to prevent further decline. Site-specific evaluations are conducted for any proposed activity that may take place within habitat for these species or near known populations. Measures are taken to avoid adverse effects.

VG-1—For the species listed below, inventory suitable habitat and monitor known sites to provide population status, distribution, and trends that will contribute to the delisting of these species.

VG-2—During wildland fire suppression efforts, avoid placing disked or plowed lines in Harper's beauty, Florida skullcap, Godfrey's butterwort, and white birds-in-a-nest habitat. Rehabilitate any lines soon after the fire suppression effort is complete.

Harper's Beauty. This endangered plant species is known only on the Apalachicola NF. The Forest Service protects it by following guidelines found in the *Harper's Beauty Recovery Plan*, USFWS. Specific management practices favoring recovery of this species include prescribed burning on a 3-year average and avoiding mechanical ground disturbance in suitable habitat.

Florida Skullcap, Godfrey's Butterwort, and White Birds-in-a-Nest. These threatened plant species all inhabit poorly drained coastal pinelands and are found, among other places, on the Apalachicola NF. The Forest Service protects them as guided by *Recovery Plan for Four Plants of the Lower Apalachicola Region, Florida*, USFWS. Specific management practices favoring recovery of these species include prescribed burning on a 3-year average and avoiding mechanical ground disturbance in suitable habitat. In addition, wet savannahs and cypress-dominated wetlands are unsuitable for timber production which precludes timber-related impacts to Godfrey's butterwort and Florida skullcap.

Apalachicola Rosemary. This endangered species has not been found on the national forests in Florida. The *Recovery Plan for Apalachicola Rosemary*, USFWS, advises that it should be searched for on the Apalachicola NF, where it appears that suitable habitat exists. The Forest Service follows this guidance.

Florida Bonamia, Scrub Buckwheat, and Small Lewton's Milkwort. Florida bonamia is a threatened species, with the healthiest population occurring in the Big Scrub of Ocala NF. Scrub buckwheat (threatened) and small Lewton's milkwort (endangered) also occur on Ocala NF, where they straddle the scrub and high pineland habitats. In protecting these plants, the Forest Service is guided by *Recovery Plan for Nineteen Florida Scrub and High Pineland Plant Species*, USFWS. Specific management practices favoring recovery of these species include harvesting sand pine in the scrub ecosystem to provide disturbance at a scale similar to that experienced through natural, periodic, catastrophic fire.

VG-3—Maintain ecotonal areas between longleaf pine-turkey oak and sand pine scrub by prescribed burning every 2-7 years.

Maintenance/Restoration of Potential Natural Vegetation

In the national forests, there are areas with rare plants and communities that can be damaged by ground-disturbing activities. Protection of these is an important part of the Forest Service direction to preserve biodiversity. At the other end of the spectrum, each national forest has areas in which past practices have resulted in conditions outside the range of natural variation. In some cases, the most cost-effective way to pursue a restoration project is to sell timber that needs removal. To the casual viewer, this may look like timber production, but there is a difference. The goal of a restoration project is returning the native vegetation to a site. Such restoration projects may occur in management areas that are unsuitable for timber production.

VG-4—Locate and perpetuate seepage bogs, spring runs, sinkhole edges, dwarf cypress forests, savannahs, wet prairies, areas of extreme range locations of selected species (such as Atlantic white cedar), and areas of high concentration of rare species. As ongoing study recognizes additional significant botanical sites, they will be included in this list.

- 1. In these areas, reduce new events of ground disturbance for reasons other than restoration. Close these areas to any use that may rut or erode the ground or disturb native plants.
- 2. Avoid ground-disturbing firelines in these areas, except as necessary to protect life, private property, or PETS species. Restore firelines within 3 months, except where restoration itself would cause further damage.
- 3. Promote restoration of these sites. Choose restoration practices that will not cause undue further degradation.

VG-5—In areas where titi has encroached, run hot fires into the titi or chop and burn the area. Seek to minimize soil disturbance when chopping.

VG-6—In areas where slash pine has been planted off-site, schedule a change in species to the appropriate native species.

VG-7—Even if a stand of trees to be regenerated is not in timber production, use the standards found in the ``Timber Production" section to guide regeneration and stand improvement activities.

Timber Production

In the Organic Act of 1897, Multiple-Use Sustained-Yield Act of 1960, and National Forest Management Act of 1976, Congress directed that one of the purposes of national forests shall be the production of timber. In the national forests in Florida, the primary timber species are longleaf and slash pine (found on Apalachicola, Ocala, and Osceola NFs) and sand pine (found primarily on Ocala NF).

VG-8—Do not manage hardwood or cypress stands or inclusions for timber production. Hardwood and cypress can be managed and harvested for other resource objectives.

VG-9—In even-aged pine stands selected for changing to uneven-aged, initiate group selection cuts when enough trees are of cone-bearing age to provide a reliable seed source and stocking level is such that an adequate amount of trees is left after harvest. This change will require several entries at 10-to-20 year intervals.

VG-10—In uneven-aged management, determine size-specific harvest rates based on the current and future desired tree density, standing biomass, and diameter distribution. D(max) should be set to provide at least six trees per acre that are larger than 18 inches in diameter. **Note:** In the model that determines harvest rates, setting q in the range of 1.2 to 1.4 and D(max) to 22 inches is appropriate, though site-specific analysis may indicate better choices.

VG-11—In longleaf and slash pine, group selection and irregular shelterwood harvest areas, retain, if available, at least six pine trees per acre that are larger than 18 inches in diameter. This may be averaged over the cutting unit instead of leaving six trees on each acre.

VG-12—To enhance wildlife habitat, retain throughout the forest all relict and flattop longleaf and slash pines and some that are misshapen, poorly formed, or suppressed.

VG-13—Design group selection harvests so new openings created during an entry range from ½ to 2 acres.

VG-14—To maintain soil fertility, require trees that are cut in a timber sale be topped and limbed where they are felled (severed from the stump), unless it is impractical to do so or analysis shows it to be undesirable. If a limbing gate or other device is used, require slash to be distributed across the site.

VG-15—To enhance visual quality, require that slash, tops, and logging debris be piled no more than 2 feet high within 100 feet of levels A and B roads and designated trails.

- **VG-16**—During regeneration, favor tree species that are native to the site.
- **VG-17**—Use prescribed fire as the preferred method of site preparation in longleaf and slash pine sites.
- VG-18—Minimize soil-disturbing site preparation in longleaf and slash pine sites. When disturbance is necessary to achieve the desired future conditions, use methods that displace no more than 10 percent of the soil surface in the treated area. The objective should be to maintain the integrity of the native herbaceous vegetation (especially wiregrass) over time.
- VG-19—If herbicides are used for site preparation, use only spot grid or strip application or individual stem or directed foliar spray. Do not use herbicides for site preparation within 60 feet of any known PETS plant species, except where it is necessary to restore PETS habitat. Clearly mark buffers around PETS species so applicators can see and avoid them. Consider the visual impact of herbicide use for site preparation within 100 feet of a designated trail to maintain the trail's visual quality.
- **VG-20**—To enhance visual quality, the row effect will not be evident when planting trees along levels A and B roads and designated trails.
- VG-21—Use the following restocking levels as guides in conjunction with professional judgement to determine acceptable restocking based on the likelihood that additional efforts will greatly increase stocking, site capability for timber production, and ecosystem health objectives.

	Lower Level	Upper Level
Longleaf Pine	200	1,200
Sand Pine	200	1,500
Slash Pine	250	900

- **VG-22**—Do not allow fertilization for timber production.
- **VG-23**—Thin stands of longleaf and slash pine to capture mortality, maintain or improve growing conditions for the remaining stems, improve habitat conditions for PETS species, or improve growing conditions of understory species.
- **VG-24**—Manage suitable forestland acres of sand pine to maintain 5 percent in age classes from 55 to 80.
- **VG-25**—Use clearcut as the preferred method of final harvest in sand pine. Use all other silvicultural practices to meet site-specific needs.
- **VG-26**—During sand pine harvesting, leave as many standing snags as possible. If an average of one snag per acre is not present, leave live trees to bring the total to one per acre. Where possible, to enhance the visual quality, leave clumps of up to 4 trees.
- VG-27—Decide, on a case-by-case basis, to protect oak scrub stands or convert them to sand pine stands. Scrub-jay habitat suitability is one of the considerations in the decision.

VG-28—In inactive bombing ranges, schedule final harvest of sand pine in July, August, and September, when possible, to increase the likelihood that the site will regenerate naturally. Do not use ground-penetrating equipment; unexploded munitions may be present.

VG-29—Sell no more than 103 million cubic feet (MMCF) of chargeable timber from suitable land (Appendix B, `Lands Suitable for Timber Production") in the 10-year planning period.

VG-30—When even-aged regeneration harvests are scheduled within the view of level 1 travelways and level 3 or above recreation area entrance roads or facilities, the harvest shall be planned with concern for scenery values. Coordinate with personnel trained in the Scenery Management System.

VG-31—When even-aged regeneration harvests are scheduled within the view of level 1 travelways and level 3 or above recreation areas, harvesting should begin in the background and the viewed area should be cut last to limit exposure to visual impacts.

Genetic Resources

National Forests in Florida participates in the genetic resource program of the Forest Service. The Genetic Resource Management Area on the Ocala NF is part of this program, as are various progeny tests located on the forests. The original purpose was to propagate trees that showed traits of rapid growth, high wood quality, and stress resistance that make them better than average for timber production. Orchards of such trees have been established and are used as seed sources for some of the pine regeneration on the forests. Under ecosystem management, focus of the genetic resource program has expanded to include genetic conservation. The Ocala Genetic Resource Management Area has both a sand pine gene bank and a variety of rare species being preserved by propagation. The genetic variation in these plants is being inventoried with the goal of learning how to maintain appropriate genetic diversity in each.

Salvage and Snags

When trees are killed by a natural cause, the District Ranger may sell some of the dead trees, depending on the management direction for the area and site-specific analysis.

Snags

VG-32—Remove snags only in the following locations:

- 1. Developed recreational sites where they pose a hazard.
- 2. Where the snag may fall into the travel corridor of a designated trail or a level A, B, or C road.
- 3. Adjacent to utility rights-of-way.
- 4. Where snags hinder fire management or create hazardous conditions for fire fighters.

Salvage

When salvaging sand pine, leave two to four snags per acre when possible. When salvaging longleaf, slash, loblolly, or pond pine, leave six snags per acre, when possible. In all cases, choose for retention snags with largest diameter and height.

Special Forest Products

People are interested in collecting a number of the natural products on the national forests. All collections require a permit from the District Ranger, who is responsible for setting the appropriate restrictions on both the quantity and the location of collections. Permits can be free for small quantities for personal use only. The product, location, and quantity of free uses are left to the discretion of the District Ranger. Some products are harvested for commercial use and fees are collected by the Forest Service. Some forests have established local markets and historical uses for certain products while other forests have not. The following table shows the special forest products permitted for commercial harvesting.

VG-33—Permit commercial harvesting of these special forest products on the following forests (TABLE 3.1):

Table 3.1
Special Forest Products

Special Forest Products	Apalachicola NF	Ocala NF	Osceola NF
Pine Needles			X
Pinecones		X	X
Christmas Trees		X	
Aquatic Plants			X
Deer Moss - Cladonia spp.	X	X	X
Sphagnum Moss - Sphagnum spp.			X
Spanish Moss - Tillandsia usneoides			X
Palmetto Berries - Serenoa spp.		X	X
Palmetto Fronds - Serenoa spp.		X	X
Turkey Oak - Quercus laevis	X	X	
Crookedwood or Dragonwood - Lyonia ferruginea		X	
Wax Myrtle - Myrica cerifera		X	X
Mistletoe - Phoradendron sertinum	X		X
Gallberry - <i>Ilex glabra</i>	X		X
Deer Tongue - Carphephorus odoratissimus			X
Lightered Wood	X	X	X
Earthworms	X		

Note: Quantity and location restrictions are left to the discretion of the District Ranger.

VG-34—Permit collection of firewood only in designated areas. Do not permit cutting of standing dead snags or mature oak hammocks for firewood. Developing oak hammocks will be evaluated for their relative abundance and their impact on wildlife species. If analysis indicates it is appropriate to remove some of them, firewood may be sold from these areas.

VG-35—Only sell Lyonia ferruginea and deer moss from areas scheduled for regeneration.

VG-36—Only permit lightered stump extraction where stumps occur within a proposed road, facility, or other planned construction or where their removal is part of an administrative study.

Exotic Species

Nonnative plants invade the national forests; some of these spread aggressively and can pose a significant threat to native species. The Florida Exotic Pest Plant Council has identified the most invasive ones (Appendix C, "Invasive Plants"). The Forest Service tries to control these and to limit opportunities for invasion by any other nonnative species.

VG-37—Control invasive terrestrial and aquatic weeds. If herbicides are used, apply directly on the spot. Do not apply herbicides within 60 feet of any PETS plant species unless analysis indicates herbicide use is the best way to protect PETS plants from invasive weeds.

VG-38—Plant only native species—except nonnative (noninvasive, nonnoxious) species may be planted in wildlife plots, in developed recreation sites, in administrative sites, or for erosion control. Do not plant species capable of invading adjacent land. Use Bahia grass (*Paspalum notatum*) where it is the only practical option.

VG-39—When a project requires mulch, require that the mulch come from a source that is certified apparently free of invasive weeds or their seeds. Hay taken from a roadside may not be weed-free.

Old Growth

The Forest Service recognizes old-growth forests as a valuable natural resource worthy of protection, restoration, and management. Old-growth forests provide a variety of values, such as biological diversity, wildlife habitat, recreation, aesthetics, soil productivity, water quality, aquatic habitat, cultural values, and high-value timber products. Direction for old-growth management is found in Chapter 4, "Management Area Goals, Desired Future Conditions, Standards, and Guidelines." Additional direction can be found in Guidance for Conserving and Restoring Old-Growth Forest Communities on National Forests in the Southern Region, Report of the Region 8 Old-Growth Team, June 1997.

VG-40—In addition to the large and medium-sized old-growth patches allocated in Chapter 4, small patches (1-99 acres) of existing or future old growth will be designated during field examination and inventory throughout the planning period. These small patches will be designated to help fulfill the forestwide objectives found in Chapter 2, "Forestwide Desired Future Conditions, Goals, and Objectives," and the management area DFCs for MA 7.1, 7.2, 7.3, and 9.2 found in Chapter 4. Small patches will be designated as old growth in the upland longleaf pine and southern wet pine communities and classified as unsuitable for timber production. The use of RCW clusters and recruitment/replacement stands is compatible with old-growth designations. Small patches also will be designated as old growth in the dry and dry mesic oak/pine, upland mesic hardwood, and dry and xeric oak communities. These patches will be unsuitable for timber production. Any stands inventoried and found to

be existing old growth (based on Regional Guidance) will be designated as old growth and classified as unsuitable for timber production.

Watershed and Air

National forests were created for several purposes. One was to help protect watersheds and provide clean water. From its beginning, the Forest Service has recognized that soil, water, and air are the basic building blocks for properly-functioning ecosystems. Protection of these resources constitutes an investment in present and future health and productivity of national forests. Direction for this is found in FSM 2500, *Watershed and Air Management*, Federal and State laws and regulations, and local plans and regulations.

Soil and Water

For protecting water quality and soil productivity, *National Forests in Florida* uses as a baseline the silviculture Best Management Practices (BMPs), developed under the auspices of the Florida Department of Agriculture and Consumer Services. The Forest Service adds further restrictions on activities to protect water and soil or to enhance wildlife habitat. These restrictions apply to all activities. Site-specific conditions of every project are assessed, and appropriate restrictions are employed to protect resources and meet State and Federal water quality standards.

WA-1—Adhere to standards of Florida's silviculture BMPs. For a detailed discussion of these practices, see the *1993 Silviculture Best Management Practices Manual*.

WA-2—Expand Primary Zones (as defined in Florida's silviculture BMP manual) to include not just perennial lakes and ponds 2 acres or larger, but all seasonal lakes and ponds, and all sinkholes that are open to the Floridan aquifer. Apply the following zone widths (primary zone width for tributaries of Outstanding Florida Waters is determined by stream width):

Stream Width/Classification	Primary Zone Width
≤ 20'	35' per side
20-40'	75' per side
≥ 40'	200' per side
Lakes and Ponds	35'
Sinkholes Open to Floridan Aquifer	35'
Sinkhole Depression Ponds	35'
Outstanding Florida Waters	200' per side

WA-3—Prohibit timber harvesting, including salvage, in the Primary Zone, except for sand pine. Harvesting done to control the spread of insects or diseases may occur in the Primary Zone.

WA-4—Consult, when necessary, the U.S. Army Corps of Engineers, Federal Environmental Protection Agency, Florida Department of Environmental Protection (DEP), and Florida Water Management Districts concerning activities in wetlands and along navigable waters to exchange information and acquire necessary permits.

WA-5—If management activities during a project leave insufficient ground cover to control erosion, revegetate disturbed areas by the end of the first growing season.

WA-6—Restrict soil-compacting activities—including logging traffic—on Bladen, Eureka, Iberia, and Meggett soil series when the water table is within 12 inches of the surface, or when soil moisture exceeds the plastic limit. Soil moisture exceeds the plastic limit if the soil can be rolled to a pencil size without breaking or crumbling.

WA-7—Identify and protect aquifers and public water sources. Consult State DEP and Water Management Districts to assure compliance with their groundwater protection strategies.

Air Quality

The Forest Service faces the challenge of balancing the need for clean air and the need to conduct prescribed fires in fire-adapted ecosystems. Prescribed fire will reduce fuels, preventing devastating wildfires, which generate more particulates than prescribed fires. In finding this balance, the Forest Service works with State and Federal air regulatory agencies to: (1) assure a level of air quality that is adequate to promote public enjoyment of forest resources and to permit attainment of the desired future condition of forest resources, and (2) assure that modifications to the *Florida State Implementation Plan* (regulatory plan for achieving Clean Air Act goals) do not cause undue restriction on forest management prescribed burning.

WA-8—Review all proposed air pollution permits that threaten the air quality values of Bradwell Bay Class I area. Advise the permitting authority if an adverse impact is anticipated.

WA-9—Conduct all national forest management activities in a manner that does not cause: (1) a violation of the National Ambient Air Quality Standards or (2) a violation of applicable provisions of the *Florida State Implementation Plan*.

Wilderness

National Forests in Florida contains seven wilderness areas designated by Congress. These areas are managed according to the Wilderness Act of 1964, Eastern Wilderness Act of 1975, and Florida Wilderness Act of 1983. In addition, there are two wilderness study areas designated by Congress. The Forest Service seeks to preserve and protect the wilderness character of these areas, to ensure their ecosystems are governed by natural processes, and to ensure that an enduring resource of wilderness is passed on to future generations. Wild by law, these areas are part of the National Wilderness Preservation System. Using the concepts of management areas, the National Forests in Florida has attempted to provide a range of wilderness experiences, from the most challenging and risk-taking wayfinding to designated hiking trails and campsites. Standards and guidelines for these areas are found under Management Areas 0.1, 0.2 and 0.4 in Chapter 4.

Wildlife and Fish

Proposed, Endangered, Threatened, and Sensitive Species Management

Proposed, endangered, and threatened species are federally listed species. The Forest Service cooperates with the U.S. Fish and Wildlife Service in conserving threatened and endangered species. The Forest Service conducts activities and programs to assist in the identification and recovery of threatened and endangered plant and animal species. Sensitive species are species identified by the Regional Forester as showing significant declines in population numbers, density, or habitat capability that could reduce the species' existing distribution. The management goal for a sensitive species is to prevent it from becoming so rare that it is federally listed. A biological evaluation of whether a vegetative management project could affect any species federally listed as threatened, endangered, proposed, or identified by the Forest Service as sensitive, is done as part of site-specific forest plan implementation and project preparation. The type and amount of information used to determine effects will vary according to our knowledge of species/habitat relationships, risk to the species from proposed actions, and/or risk to species viability. Appropriate project level inventory/surveys for a TES species are the following:

- Gathering and summarizing population occurrence data from the Forest Service and other sources such as the State Natural Heritage Program.
- Collecting information on the amount and distribution of suitable habitat
- Conducting field surveys to determine species occurrence, if past field surveys are not available in areas where treatments are proposed. Field surveys are only appropriate for those species that lend themselves to this type of survey. Actual field surveys may not be appropriate for species (1) when field surveys have a low likelihood of detecting the species, (2) when there is sufficient confidence that the proposed activities will have short or long term beneficial or no effect to the species, or (3) when the science regarding species/habitat relationships and the response of habitat to proposed activities is well established. Amendment #1

For any project that may affect federally listed species the U.S. Fish and Wildlife Service needs to be consulted.

Target species that are potential candidates for reintroduction or augmentation include the Florida panther or other subspecies of *Felis concolor*, red wolf, bison, red-cockaded woodpecker, Bachman's warbler, eastern indigo snake, gopher tortoise, and Florida black bear. Reintroduction and augmentation may be done to contribute to a species' recovery, restore the natural community structure, test the feasibility of species reintroduction, or provide a source for additional reintroductions on other lands.

Red-cockaded Woodpecker. The standards and guidelines the Forest Service follows to protect the red-cockaded woodpecker and its habitat are found in the *Record of Decision*, Final Environmental Impact Statement for the Management of the Red-cockaded Woodpecker and its Habitat on National Forests in the Southern Region (RCW EIS).

RCW Management Strategy Implementation Guide describes the process for implementing these standards, and any less-restrictive deviations from these standards require concurrence with USFWS. The basic strategy is to provide old pine trees that are suitable for nesting cavities, mature pine forest suitable for foraging with little midstory, and enough of each to maintain a healthy population. RCW habitat management area (HMA) maps are found in Appendix F.

The following three standards are deviations from the RCW Recovery Plan and USFWS foraging guidelines.

- WL-1—In the Apalachicola HMA, the Forest Service will provide at least 4,100 pine stems 10 inches diameter at breast height (DBH) and a minimum of 5,500 sq. ft. of pine basal area of foraging habitat. These values are for each cluster and will be provided within ½ mile of clusters. If this is not available within ½ mile, foraging radius will be extended until foraging requirements are met, but no further than ¾ mile from the cluster center. The Forest Service will cease timber harvesting under this standard and initiate Section 7 consultation with the U.S. Fish and Wildlife Service if monitoring indicates a difference, as described in the monitoring section, in RCW variables when comparing RCW groups associated with timber harvest utilizing the reduced foraging guidelines and RCW groups that are unaffected by the new harvest standards.
- WL-2—Stands within foraging habitat that average greater than or are equal to 10 inches DBH and not considered uneven-aged should be maintained with an average pine basal area of 60-110 square feet. When thinning mixed longleaf/slash pine stands, the priority is to remove slash pine and retain as much longleaf pine as possible.
- **WL-3**—Even-aged harvesting restrictions in the next 10 years within RCW HMAs are modified as follows: Allow irregular shelterwood harvest in slash pine of up to 1,000 acres on the Apalachicola Ranger District (RD), 500 acres on the Wakulla RD, and 300 acres on the Osceola NF.
- **Bald Eagle.** The Forest Service protects bald eagle breeding areas by meeting the guidelines established in the most recent version of *Habitat Management Guidelines for the Bald Eagle in the Southeast Region*, USFWS. Specific guidelines include:
 - **WL-4**—Within the primary nest zone (750-1,500 ft. radius from the nest site), prohibit:
 - 1. Tree cutting, logging, construction, or mining.
 - 2. Use of pesticides toxic to wildlife.
 - 3. Felling snags.
 - **WL-5**—Within the secondary nest zone (750-5,280 ft. radius from the primary zone), restrict:
 - 1. Construction of new roads and trails tending to facilitate access to the nest.
 - 2. Use of pesticides toxic to wildlife.
 - 3. Logging, land clearing and construction activities during nesting season.

Wood Stork. The Forest Service protects wood stork nesting, feeding, and roosting sites by adhering to the guidelines established in *Habitat Management Guidelines for the Wood Stork in the Southeast Region*, USFWS. Specific guidelines include:

WL-6—Within the primary nest zone (500 ft. radius from the outer edge of the colony site where strong visual or aquatic barriers exist and 1,000-1,500 ft. radius from the outer edge of the colony site where there are no strong visual or aquatic barriers), prohibit:

- 1. Logging or other vegetation removal.
- 2. Activities that reduce the area, depth, or length of flooding in wetlands under and surrounding the colony, except where periodic (less than annual) water control is necessary to maintain healthy aquatic woody vegetation.

WL-7—Within the secondary nest zone (1,000-2,500 ft. radius from the primary zone to a maximum of 2,500 ft. from the outer edge of the colony site), prohibit:

- 1. Any alteration of the area's hydrology that may cause changes in the primary zone.
- 2. Any decrease greater than 20 percent in the area of wetlands and woods of potential value for roosting and feeding.

WL-8—Within 500-1,000 feet of roost sites:

- 1. Protect vegetative and hydrological characteristics of annually used roost sites.
- 2. Protect vegetative and hydrological characteristics of roost sites used by flocks of 25 or more.

Florida Scrub-Jay. To protect Florida scrub-jay habitat, the Forest Service follows the guidelines found in the *Florida Scrub Jay Recovery Plan*, USFWS. This consists primarily of maintaining many acres of scrub habitat in the early successional stage used by the Florida scrub-jay. Specific standards and guidelines are found in Chapter 4 under 8.0 Sand Pine and Oak Scrub.

Gulf Sturgeon. The gulf sturgeon lives, among other places, in the Apalachicola, Ochlockonee, and Suwannee Rivers, all of which receive some waters draining from national forest land. To protect water quality for this fish, the Forest Service follows the guidelines found in the *Gulf Sturgeon Recovery/Management Plan*, USFWS.

Sand Skink. The sand skink lives below the surface in loose sand and is known to occur on the Ocala NF. To protect sand skink habitat and aid in the recovery of this species, the Forest Service follows the guidelines found in the *Recovery Plan for the Sand Skink and Blue-Tailed Mole Skink*, USFWS. Specific guidelines include:

WL-9—Maintain ecotonal areas between longleaf pine-turkey oak and sand pine scrub by prescribed burning every 2-7 years.

Gopher Tortoise and Its Burrow Commensals. The gopher tortoise and its commensals are found in dry, sandy areas on Apalachicola, Ocala, and Osceola NFs. The gopher tortoise is threatened in the western part of its range but not in Florida. Gopher tortoise burrows provide habitat that is necessary for other threatened and sensitive species. Among these are the Eastern indigo snake, guidelines for protection are found in the *Eastern Indigo Snake Recovery Plan*, USFWS. Specific standards and guidelines include:

WL-10—Protect from harm or move out of harm's way indigo snakes and gopher tortoises encountered by personnel, cooperators, or contractors engaged in activities that may endanger individual specimens. Wildlife biologist should be contacted to safely move these species and collect needed data.

WL-11—In all timber sale unit openings clearly mark a 15-foot buffer around the entrance to every gopher tortoise burrow. Keep heavy equipment out of this buffer zone during both harvesting and regeneration.

WL-12—When developing maintenance management plans for new or renewed special-use permits involving rights-of-way, include the following precautions to protect colony integrity:

- 1. Permittee must conduct gopher tortoise burrow surveys in suitable habitat of the right-of-way prior to performing vegetation maintenance with heavy equipment. Surveys shall be performed by personnel familiar with gopher tortoise ecology.
- 2. Clearly mark a 15-foot radius around each burrow and keep heavy equipment out of this buffer zone.

Florida Manatee aka West Indian Manatee. Silver Glen Spring Run on the Ocala NF is an important winter refuge for the endangered West Indian manatee in the southeastern United States. To protect this species, the Forest Service is guided by the *Florida Manatee Recovery Plan*, USFWS. Specific guidelines include:

WL-13—Restrict the construction of boating facilities to areas where their construction and subsequent use will not adversely affect manatees.

WL-14—Restrict activities that degrade manatee habitat.

Florida Black Bear. Florida black bear has been proposed for Federal listing as a threatened subspecies. Apalachicola, Osceola, and Ocala NFs provide significant habitat for this animal. The Forest Service protects Florida black bears primarily by maintaining blocks of habitat in a remote condition and by acquiring further habitat lands, so that they also can remain undeveloped.

Gray Bat. It is possible that endangered gray bats forage over parts of the Apalachicola and Osceola NFs, but roosting caves are not known on the national forests in Florida. Gray bats need forest cover near the rivers and reservoirs where they feed. To protect this species, the Forest Service follows guidelines found in the *Gray Bat Recovery Plan*, USFWS.

Florida Panther. Florida panther is not known at this time to occur on the national forests in Florida, but these lands may provide suitable habitat for population expansion of this animal. The Forest Service is guided by the *Florida Panther Recovery Plan*, USFWS, in its efforts to protect this species.

Sherman's Fox Squirrel. Sherman's fox squirrel is a species of special concern. The Ocala NF provides the fox squirrel's largest area of concentrated habitat.

WL-15—Retain all den and nest trees in intermediate harvests and when thinning key areas or inclusions.

Flatwoods Salamander. The flatwoods salamander breeds in small, shallow, intermittent ponds and lives the rest of its life a few inches below the ground in the area up to a mile from its breeding pond. It occurs on the Apalachicola NF and has been recorded in one area on the Osceola NF.

WL-16—Within the primary buffer zone (600 ft. radius) of breeding ponds:

- 1. Prohibit mechanical site preparation.
- 2. Use only selective harvest methods.
- 3. Harvest will only occur during dry periods.
- 4. Do not apply pesticides, herbicides, or fertilizers, except directed foliar application of herbicide can be used to control noxious weeds. Injection, frill, girdle, thin-line basal spray or cut stump herbicides may be used to treat undesirable trees if prescribed fire cannot be employed.

WL-17—Within the secondary buffer zone (600-1,500 ft. radius) of breeding ponds:

- 1. Prohibit mechanical site preparation.
- 2. If clearcutting is used, remove no more than 25 percent of the buffer in a single entry.
- 3. Harvest will only occur during dry periods.
- 4. Do not apply pesticides, herbicides, or fertilizers, except directed foliar application of herbicide can be used to control noxious weeds. Injection, frill, girdle, thin-line basal spray or cut stump herbicides may be used to treat undesirable trees if prescribed fire cannot be employed.

WL-18—Use prescribed fires to restore or maintain salamander breeding habitat. Emphasize growing-season burning.

WL-19—Do not alter the hydroperiod of breeding ponds.

Non-PETS Species

All Forest Service activities that promote forest health contribute to habitat improvement for the native wildlife. A few activities are focused specifically on habitat enhancement for certain species; among these are wildlife openings. There are two kinds of wildlife openings, *cultivated* and *uncultivated*. Cultivated openings are small plots where the ground is prepared and seeded to noninvasive or nonnoxious plants. In fiscal year 1995, the national forests in Florida planted 30 acres with these plants. Uncultivated openings are areas where trees are removed to enhance other plants that provide good forage or habitat.

WL-20—In constructing a new cultivated wildlife opening, choose a site in which the soil has been previously disturbed.

Wildlife Structural Habitat

Wildlife structural habitat consists of natural structures—such as snags, burrows, and stump holes, and artificial structures such as nest boxes. Such structures can be critical to

wildlife. Concerning the management of snags for wildlife purposes, see standards under the "Vegetation" heading. Retaining natural structures and providing artificial ones is often part of PETS species management. Many non-PETS species benefit from them, too. The Forest Service often includes in larger projects features that enhance the structural aspects of wildlife habitats.

Exotic Species

Target species that are potential candidates for control include feral (European wild) hog, feral cat, feral dog, feral monkey, piranha, tilapia species, walking catfish, nontriploid white amur (grass carp), imported fire ants, and Africanized honey bees. Control may be used to eliminate populations or to limit them to acceptable levels. Objectives of control are to protect native plant and animal community integrity, prevent resource (soil, water, or timber) damage, and protect financial investments. Nuisance native species also may be removed from specific sites.

Fishery Resources

Waters of the forests support a nationally recognized, diverse warm-water fishery resource. Populations of sport fish—including largemouth bass, bream, and catfish—inhabit the 854 miles of prominent rivers, streams, and spring runs as well as the 36,420 acres of lakes and ponds. In addition to the more than 600 naturally-occurring water bodies within the forests, at least 50 borrow pits have become permanent human-made ponds. Although most of these naturally-occurring lakes and human-made ponds are very acid, limited in nutrients, and low in biological productivity, historically they have supported viable sport fish populations with numerous trophy-size largemouth bass. In recent years, these fish populations have suffered significant decline due to overexploitation, prolonged droughts, and acidification. Current Forest Service emphasis therefore focuses on the restoration of the fishery resources of these lakes and ponds to maintain diversity and provide anglers a choice of sportfishing experiences. All lakes and ponds are categorized as primitive, native, fishery enhanced, or developed for fishery management purposes.

Primitive. Primitive lakes are permanent water bodies that are located in designated areas or that have unique conditions that make them special. They include all sinkholes open to the Floridan aquifer and all lakes and ponds inside wildernesses, wilderness study areas, research natural areas, and remote wetland areas. A few additional lakes and ponds—Bonnett Pond (Apalachicola NF); Church Pond (Osceola NF); and Gobbler Lake, Lawbreaker Lake, and Mud Lake (Ocala NF)—are added to this category, because they are either especially undisturbed or have highly unusual features. The management goal for these water bodies is to preserve them in an unaltered state.

Native. Native lakes and ponds include all the permanent water bodies that are not listed in the other categories. These water bodies support a variety of recreational activities, including moderate sportfishing. The management goal for these is to maintain ecologically healthy conditions for the entire aquatic community. Under normal circumstances, little or no active management would be expected. However, if the aquatic community

becomes unbalanced as a result of some disturbance, the Forest Service may take action to restore balance.

Fishery Enhanced. Fishery-enhanced lakes include all permanent human-made water bodies that now exist or will be established on the national forests in Florida. These ponds may be managed specifically for sportfishing utilizing a comprehensive array of fishery management activities.

Developed. Developed lakes are permanent water bodies that support a variety of developed recreation activities, including sportfishing. Water bodies in this category are:

- 1. Apalachicola NF: Camel Lake, Moore Lake, Silver Lake, Trout Pond, and Wright Lake.
- 2. Ocala NF: Buck Lake, Buck Pond, Crooked Lake, Doe Lake, Echo Pond, Fore Lake, Grasshopper Lake, Halfmoon Lake, Lake Catherine, Lake DeLancy, Lake Dorr, Lake Eaton, Lake Lou, Mill Dam Lake, Trout Lake, and Wildcat Lake.
- 3. Osceola NF: Ocean Pond and Watertown Lake.

WL-21—Fisheries management practices for the water body categories are restricted to those in Table 3.2. Use site-specific analysis to indicate whether a given practice is warranted. Application of lime and/or fertilizer to developed lakes would be permitted in an administrative ecological study to determine the effects of these applications on the aquatic ecosystem in these water bodies.

Table 3.2 Fisheries Management Practices

Management Practices	Primitive	Native	Fishery Enhanced	Developed
Reintroduce Extirpated Fish	Yes	Yes	Yes	Yes
Control Exotic Fish	Yes	Yes	Yes	Yes
Control Aquatic Vegetation	No	Yes	Yes	Yes
Manipulate Fish Population to Restore Balance	No	Yes	Yes	Yes
Introduce Fish Structures (shelters and spawning facilities)	No	Yes	Yes	Yes
Stock Native Fish to Support Sportfishing	No	No	Yes	Yes
Install Fish Feeders	No	No	Yes	Yes
Apply Fertilizer and/or Lime to Enhance Fish Production	No	No	Yes	No